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ABSTRACT

A survey was conducted to determine the need for health occupations personnel in the Moraine Valley Community College district, specifically to: (1) describe present employment for selected health occupations; (2) project health occupation employment to 1974; (3) identify the supply of applicants for the selected occupations; and (4) identify existing training programs for these occupations. Job titles were identified and associated with their respective health employers. A total of 347 health employers were contacted through four different mailings; a total of 163 (47%) questionnaires was returned. In addition, administrators from four hospitals and three large nursing homes were interviewed. Among the results were the following: (1) rapid employment growth is expected nationally during the 1970s in all health occupations; (2) supply is not expected to keep up with demand, nationally; (3) a decrease in the percent of professionals (doctors, etc.) and a corresponding increase in the percent of technicians is anticipated during the 1970s; (4) nursing and related occupations account for 80% of the health employment in the MVCC district; (5) two-year projections by district employers anticipate largest growth in laboratory and dental occupations; (6) shortages of qualified applicants for several occupations were reported by MVCC employers; (7) on-the-job training exists for a number of occupations; and (8) short courses or seminars are needed on a variety of topics. Predictions and future program possibilities are offered. (KM)

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HEALTH OCCUPATIONS SURVEY

by
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Preface

This survey resulted from a shared concern by the Health Science faculty and the Office of the Associate Dean for Instructional Programs over the employment possibilities of Moraine Valley Health Occupational graduates.

During the fall of 1971, survey objectives and survey materials were cooperatively developed by Health Science faculty, the Office of the Associate Dean for Instructional Programs and the Office of Institutional Research. Programming of the occupational titles and their associated employers was performed by Information Systems.

Interviews and questionnaire mailings were conducted during January and February, 1972, by the Office of Institutional Research.

Lynn H. Willett
Research Associate
March, 1972

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I. Study Highlights

- Rapid employment growth, nationally, is expected during the 1970's in all health occupations. *(See p. 5)*
- Supply of qualified health personnel is not expected to keep up with demand, nationally, during the 1970's. *(See p. 5)*
- Of the total national health employment, a decrease in percent of professionals (doctors, etc.) and a corresponding increase in the percent of technicians is anticipated during the 1970's. *(See p. 6)*
- Nursing and nursing-related occupations account for eighty percent of the health employment in the MVCC district. *(See p. 8)*
- Two-year projections by MVCC district employers anticipate largest growth in laboratory and dental occupations. *(See p. 8)*
- Shortages of qualified applicants for several occupations were reported by MVCC employers. *(See p. 15)*
- On-the-job training exists for a number of occupations in the district. Dental assistants and nurse aides seem to be trained predominantly by the employer. *(See p. 17)*
- MVCC's major health employers expressed need for short courses or evening seminars on a variety of topics. *(See p. 20)*
- Predictions are offered for present MVCC programs and future program possibilities. *(See p. 21)*

II. Survey Purpose and Objectives

The major purpose of the survey was to determine the need for health occupations personnel in the Moraine Valley Community College district.

The specific objectives of the survey were:

- To describe present employment for selected health occupations.
- To project health occupation employment to 1974.
- To identify the supply of applicants for the selected occupations.
- To identify existing training programs for these occupations.

III. Manpower Model and Assumptions

Data collected in this survey will be presented in the form of a model. The following outline describes the framework for interpretation of the data:

A. National Health Employment Picture

1. Past employment by health firm.
2. Future employment by health firm.
3. Past employment (1960's) for selected occupations.
4. Future employment projections (1970's) for selected occupations.

B. Local Health Employment Picture

1. Number of present health employees for selected occupations.
2. Percent of increase in these categories by 1974.
3. Percent of health personnel attrition in major health firms.

C. Local Health Employment Supply Factors

1. Present supply of applicants.
2. Source of new employees.
3. Health programs offered in Metropolitan Chicago Area.
4. Present training by employer.

This outline is not an exhaustive framework for determining health occupational needs. Data for the following factors, which could affect future employment predictions, were not collected:

- Health personnel employed in other than health agencies, i.e., firms other than 801 through 809 S.I.C.'s-Standard Industrial Classifications, e.g., 801 is doctors' offices, etc.
- "Occupational substitution"-the downward transfer of task functions to less trained personnel, e.g., R.N. duties being performed by L.P.N.
- Re-entry into job market of "retired" health personnel, i.e., registered nurses, x-ray technicians, etc., who left job for personal reasons.
- Up-grading of existing personnel through in-house training programs.

IV. Study Procedures

An interview schedule and questionnaire (See Appendix B and C.) were developed cooperatively by the health occupational staff and the offices of the associate dean for instructional programs and institutional research.

Job titles (See Appendix E.) relate to present and future health occupation programs were identified and associated with their respective health employers. This procedure represents a departure from usual employment survey practices in which the employer is asked to pick out job titles from a long list. A computer program was developed to print these job titles on address labels with their associated firms.

A pre-test of the instrument was performed in early January, 1972.

A. Mailed Questionnaire Survey

Two different questionnaire formats were tested in the mail survey. (See Forms 1 and 2 in Appendix B.) No significant difference in response rate occurred: Form 1 had 49% return, and Form 2 generated 51%.

The employers were contacted through four different mailings (See Appendix A.):

- A pre-sensitization postcard informing them of the questionnaire's arrival.
- A questionnaire and cover letter.
- A follow-up questionnaire and cover letter.
- Final reminder (postcard).

A total of 347 health employers was identified from the MVCC District Industrial Data Bank. A total of 163 questionnaires was returned (47% response rate). The percentage of survey responses for each type of employer was nearly the same as that firm's percentage of local health employers. (See Appendix D.)

It is estimated by the Research Associate for Surveys that more than 80% of the local health employment has been accounted for by the interview and questionnaire survey.

A telephone follow-up of non-respondents was conducted by the Office of Institutional Research. The purpose of this follow-up was to determine if the non-respondents' responses were similar to those who had responded to the mail questionnaire. A sample of the non-respondents was asked the same questions which appeared on the mail questionnaire. Responses from the telephone sample were similar to the responses from the mail respondent group.

Both the response rate by type of employer and the non-respondent follow-up indicate the study results can be considered characteristic of the MVCC district health employers.

B. Interview Survey

Administrators from four hospitals and three large nursing homes were interviewed by the Research Associate for Surveys. In addition to collecting data on job titles from the questionnaire used in the mail survey, these administrators were asked to respond to questions on the interview schedule. (See Appendix C.) Data from the questionnaires is included in the MVCC district health employment Section VII. A summary of the interview comments is in Section X.

V. National Health Employment

Literature was reviewed from a variety of sources. The Department of Health, Education and Welfare; Public Health Service; Bureau of Labor Statistics, and the American Hospital Association are some of the agencies concerned with describing existing employment and projecting future trends.

These agencies tend to describe past growth in specific occupational job title areas but project only for major occupational groups, i.e., professional nurses or allied health manpower. In spite of the lack of specific projections for health occupational titles in this survey, the agencies project accelerated growth for all health occupations.

Little literature could be located on regional or Illinois health employment. The following are representative statements based on national employment:

> "Health service jobs in technical and semi-technical categories will double within the decade of the 70's." (Occupational Outlook Quarterly, 1967.)
>
> "Considering the basis for supply projections for the medical allied group, it seems reasonable to expect that requirements, in the sense of employment opportunities for well-qualified individuals, will continue to exceed supply." (Pennell, M.Y. & Hoover, D.B., 1970.)
>
> "A deficit of 400,000 allied health workers is projected for 1970." (U.S. Department of Labor, 1971.)
>
> "Training programs for which data are available account for perhaps 7,000 annual graduates. However, the size of the current work force requires 5 to 10 times this number of annual additions merely to replace losses. Most individuals in this group continue to be trained in apprenticeship fashion, on-the-job, or in commercial schools. For many occupations the average length of employment is short, unemployment turnover is high. Training capabilities, therefore, will continue to be strained." (Allied Health Professions Personnel Training Act, 1971.)
>
> "The anticipated growth in health services employment is based on a complex variety of factors, e.g., population growth, new drugs, etc." (Occupational Outlook Handbook, 1971.)

Four tables of national health projections are included in this report: Health Employment by Industry, Health Employment by Major Occupational Group, Health Employment by Selected Occupational Job Titles and Dental Employment for two para-professional occupations.

Hospitals have been and are projected to be the major employing agency of health personnel. (See TABLE 1.)

"Hospital personnel account for two-thirds of all workers in the health services industry." (Public Health Service, 1968.)

TABLE 1.

Percent of National Health Employment by Industry from 1960-75*

Industry	1960	1966	1975
Hospital	66.5%	64.1%	64.7%
All Other Health Services	33.5%	35.9%	35.3%
Total	100 %	100 %	100 %
	(1,547,100)	(2,206,500)	(3,400,000)

*(Source: Tomorrow's Manpower Needs, 1969.)

TABLE 2 displays the percentages for selected health occupations of the total of professional and para-professional health occupations. A shift from professional to para-professional can be seen by comparing the 4% decrease in professionals from 1960-75 with the corresponding 7% increase in technicians.

TABLE 2.

Percent of National Health Occupational Group for 1960 and 1975*

Occupation	1960	1975
Professionals (Doctors, Dentists, etc.)	38.8%	34.1%
Nurses, Professional	37.5%	38.3%
Technicians, Medical and Dental	10.6%	17.5%
Other Medical Health	12.9%	9.9%
Total	100 %	100 %
	(1,321,000)	(2,240,000)

*(Source: Tomorrow's Manpower Needs, 1969.)

Significant increases are projected by 1980 for a wide variety of para-professional positions. (Schultz, 1971.) These significant increases reflect the growing demand for para-professional personnel in the 1970's. (See TABLE 3.)

TABLE 3

Specific Health Manpower Projections for 1980*

Occupation	Est. Employment 1968	Projected Requirements 1980	Percent Change 1968-80
Dental Laboratory Technician	27,000	37,500	38.9
Registered Nurses	660,000	1,000,000	51.5
Medical Laboratory Workers	100,000	190,000	90.0
Radiologic Technician	75,000	120,000	60.0
Licensed Practical Nurses	320,000	600,000	87.5
Hospital Attendents	800,000	1,500,000	87.5

*(Source: Occupational Outlook Quarterly, 1970.)

By 1980, 48% more dental assistants and 23% more dental technicians will be employed in the dental profession. (See TABLE 4.)

TABLE 4

National Dental Occupation Manpower Projections to 1980*

Occupation	1967	1980	Percent of Change
Dental Assistant	113,800	168,000	48%
Dental Technician	31,900	39,200	23%

*(Source: Pennell, M.Y. & Hoover, D.B., 1970.)

VI. MVCC District Health Employment and Projections

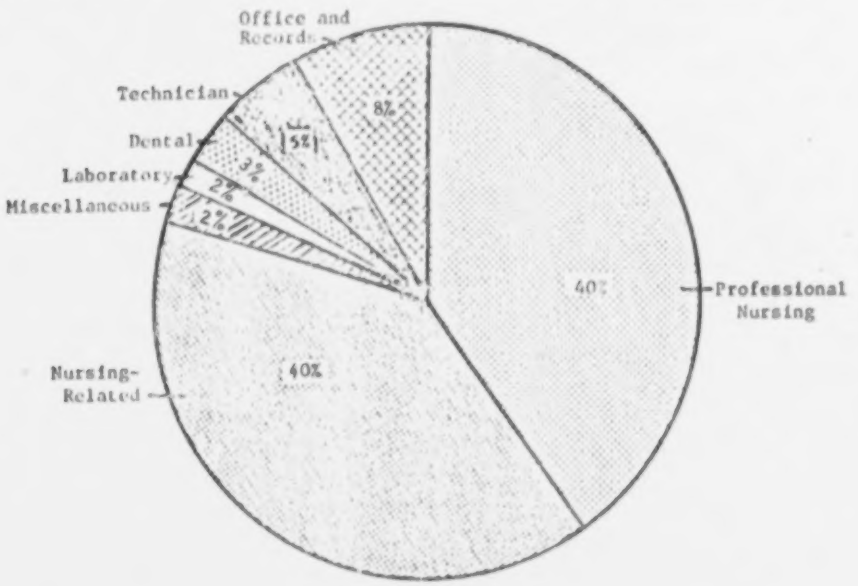
Some assumptions, synthesized from a variety of literature, must be considered in making health employment projections. Factors which will cause an increased demand in the Moraine Valley district for health services and health personnel are:

- Public demand for rising health care standards.
- Wider participation in private and public health insurance.
- Growing emphasis on preventative medicine and rehabilitation.
- Shifting age distribution (older population, and increasing life span).
- Increasing social consciousness for a more equal distribution of health services to all people.
- Health hazards resulting from industrial economy.
- Medical and scientific advances.
- Increasing role of government in health.

FIGURE 1 shows the distribution of health occupational employment in the MVCC district for the various occupational groups. Nursing and nursing-related occupations account for 80% of the total reported employment. Secretaries account for a large proportion of the "Office and Records" employment.

FIGURE 1.

MVCC District 1972 Occupational Group Employment Percentages *

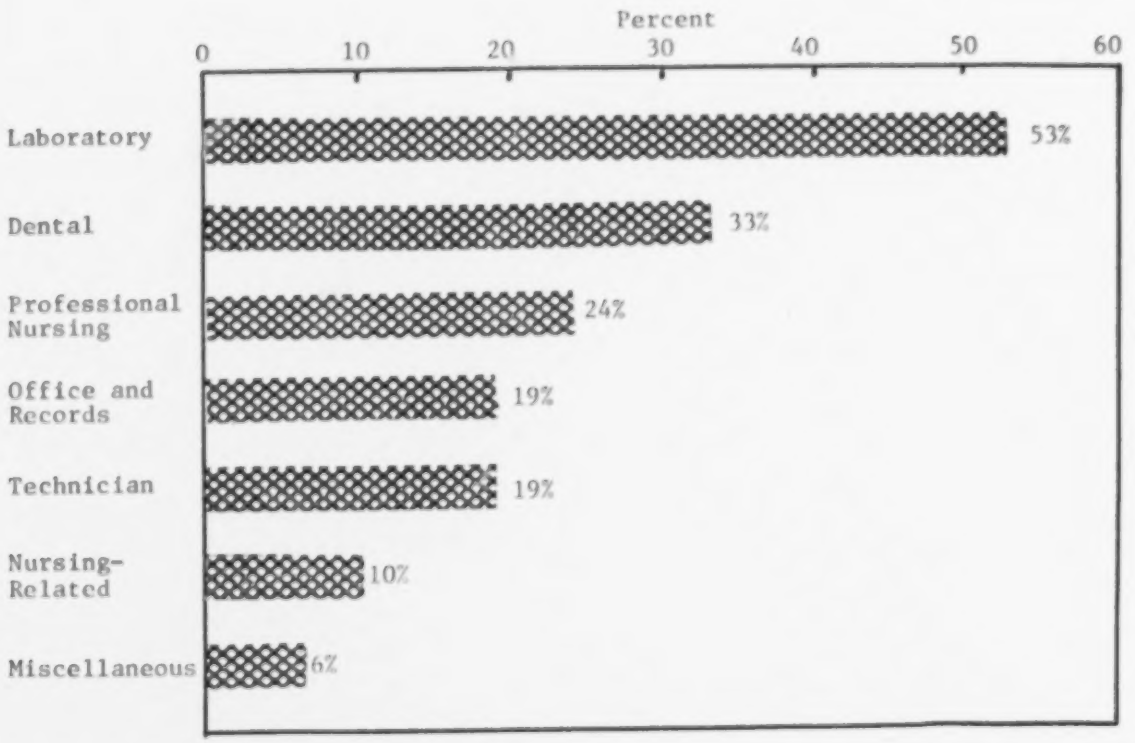


* Professional Nursing = Registered Nurse and L.P.N.
Nursing-Related = Nurse Aide, Orderlies, etc.
Office and Records = Medical Secretary, Medical Record Technician, etc.
Technicians = X-Ray Technicians, Inhalation Therapists, etc.
Dental = Dental Assistant, Dental Lab Technician, etc.
Miscellaneous = Pharmacy Assistant, Food Service Supervisor, etc.

Employers were asked to project their employment needs for 1974. FIGURE 2 displays percentage growth for selected occupational groups. Laboratory and dental occupations represent the largest percentage increases over present employment levels. Least amount of growth is anticipated for the nursing-related category (nurse aides, orderlies, etc.) and the miscellaneous category (pharmacy assistant, social worker aide, etc.). These findings seem to parallel the national trends revealed in TABLES 3 and 4.

FIGURE 2.

MVCC District
Projected Increases for Occupational Groups by 1974*



* Occupational groupings same as in FIGURE 1.

FIGURES 3-9 display present and future health employment for the selected survey occupations in the MVCC district. In most cases, two employment figures are displayed for each health occupation; however, no additional health personnel was contemplated for several of the occupations. Replacement needs, resulting from turnover, must be considered for all occupations.

FIGURE 3 shows registered nurses to be the largest single employment category of all health occupations in the district. However, the largest percent of growth is anticipated for licensed practical nurses. Employment of both L.P.N. and R.N.'s is expected to increase. The new Palos Community Hospital accounts for most of these increases.

FIGURE 3.

MVCC District
1972 Employment and 1974 Projections for Nursing Occupations

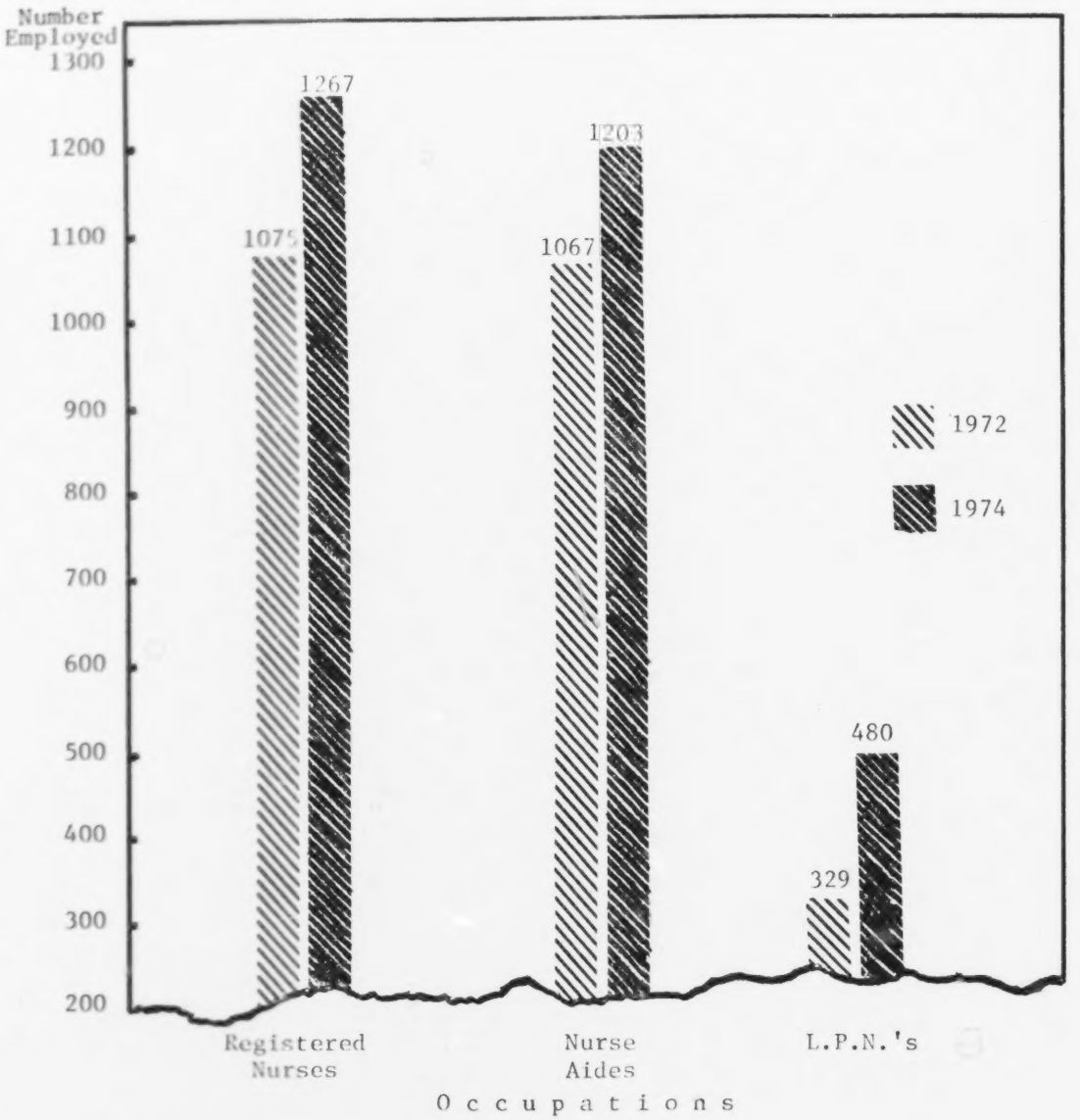
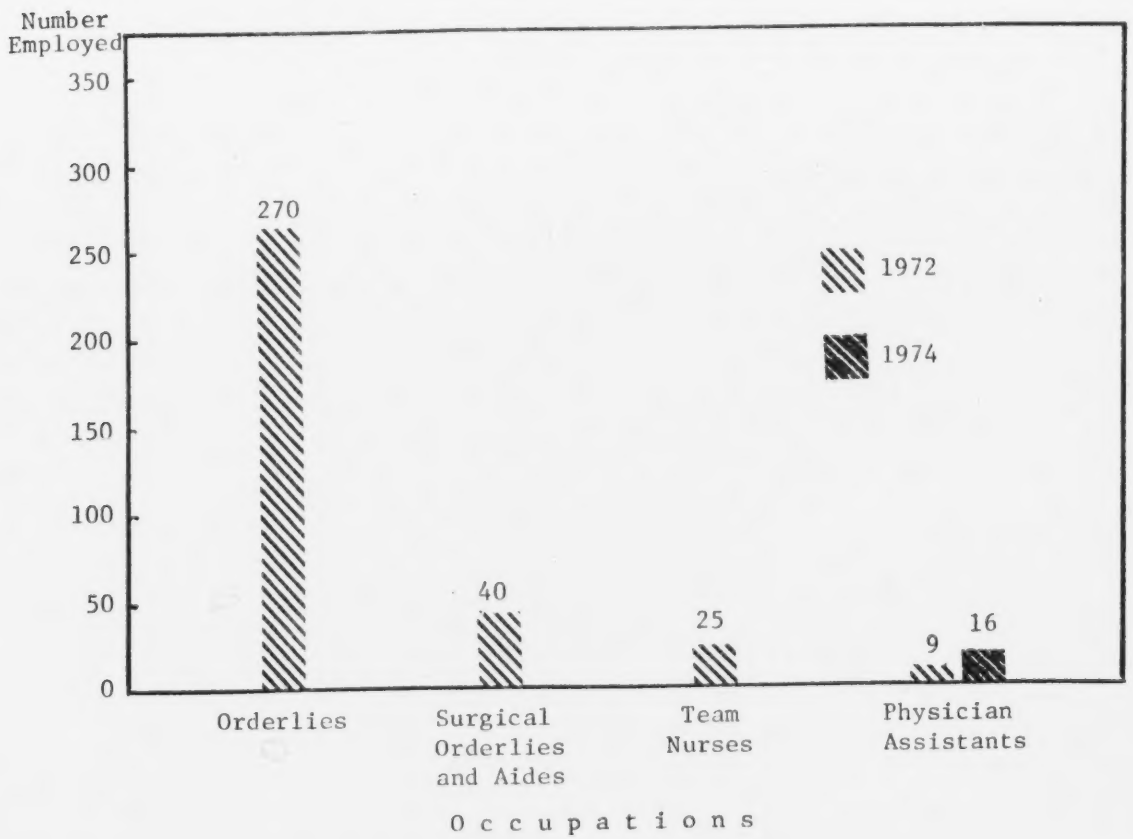


FIGURE 4 displays employment data for other nursing-related occupations. Limited growth is anticipated only in the physician assistant category.

FIGURE 4.

MVCC District
1972 Employment and 1974 Projections for Nursing-Related Occupations



FIGURES 5 and 6 display additional employment figures. Social worker aide and dietitician assistant (FIGURE 5), medical laboratory technician and laboratory assistant (FIGURE 6) represent areas of anticipated employment growth. Additional employment in other occupations is not expected to increase.

FIGURE 5.

MVCC DISTRICT

1972 Employment and 1974 Projections-Other Health Occupations

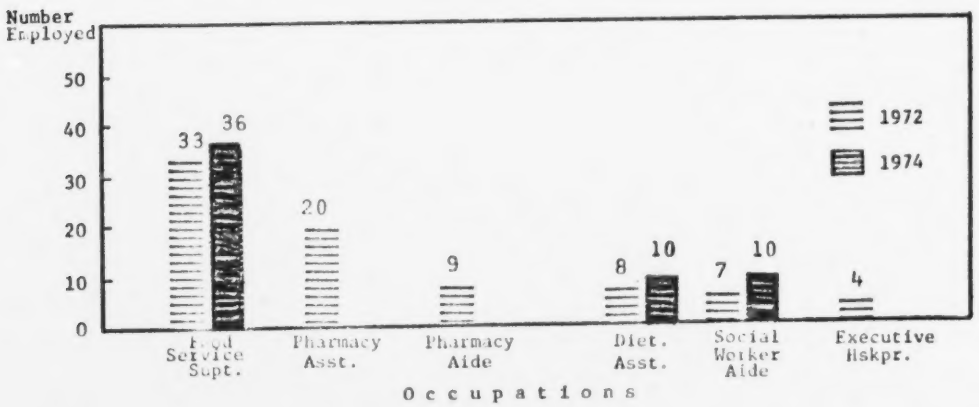
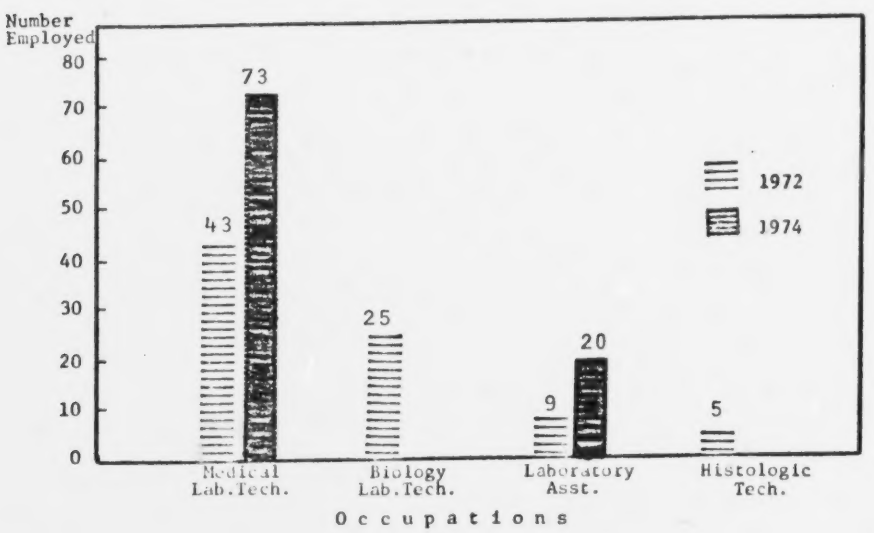


FIGURE 6.

MVCC DISTRICT

1972 Employment and 1974 Projections for Laboratory Occupations



FIGURES 7 and 8 display the remaining health occupations in the survey. Significant growth is anticipated in medical secretary, x-ray clerk, medical records librarian (FIGURE 7). X-Ray technician, physical therapy technician and medical records technician are also expected to add additional personnel (FIGURE 8).

FIGURE 7.

MVCC District
1972 Employment and 1974 Projections for Office and Records Occupations

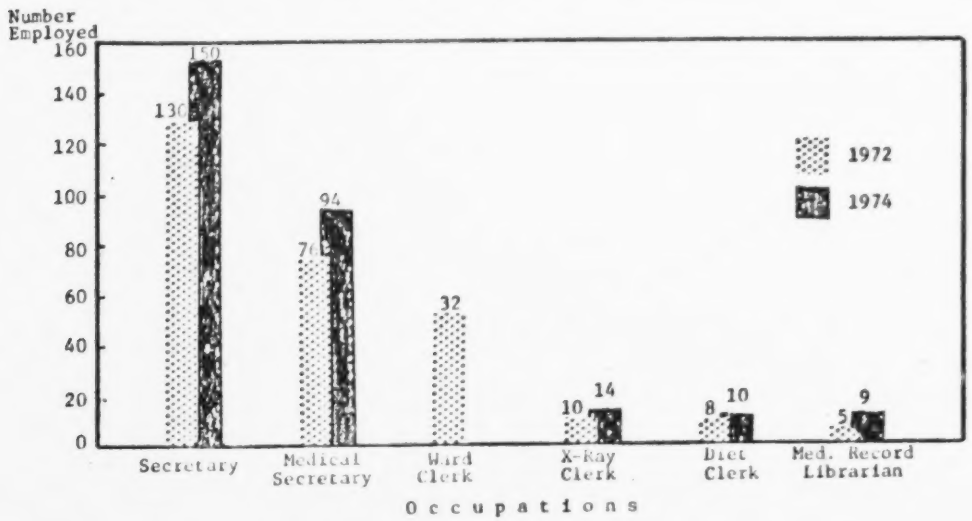
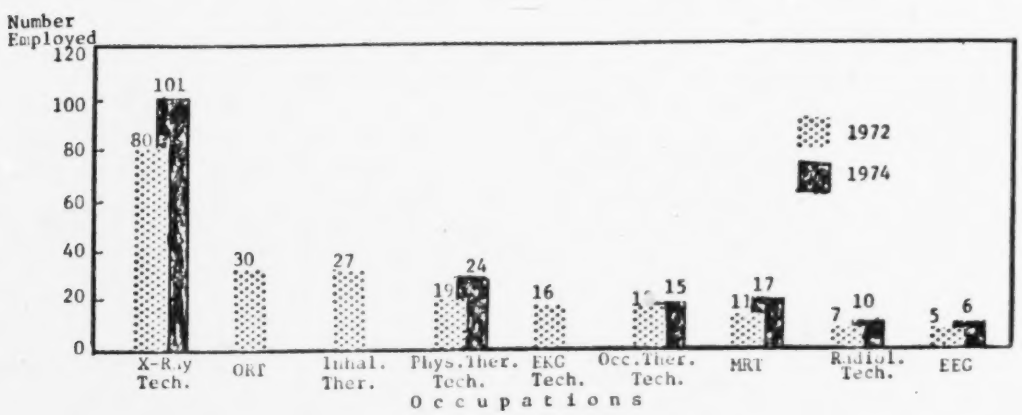


FIGURE 8.

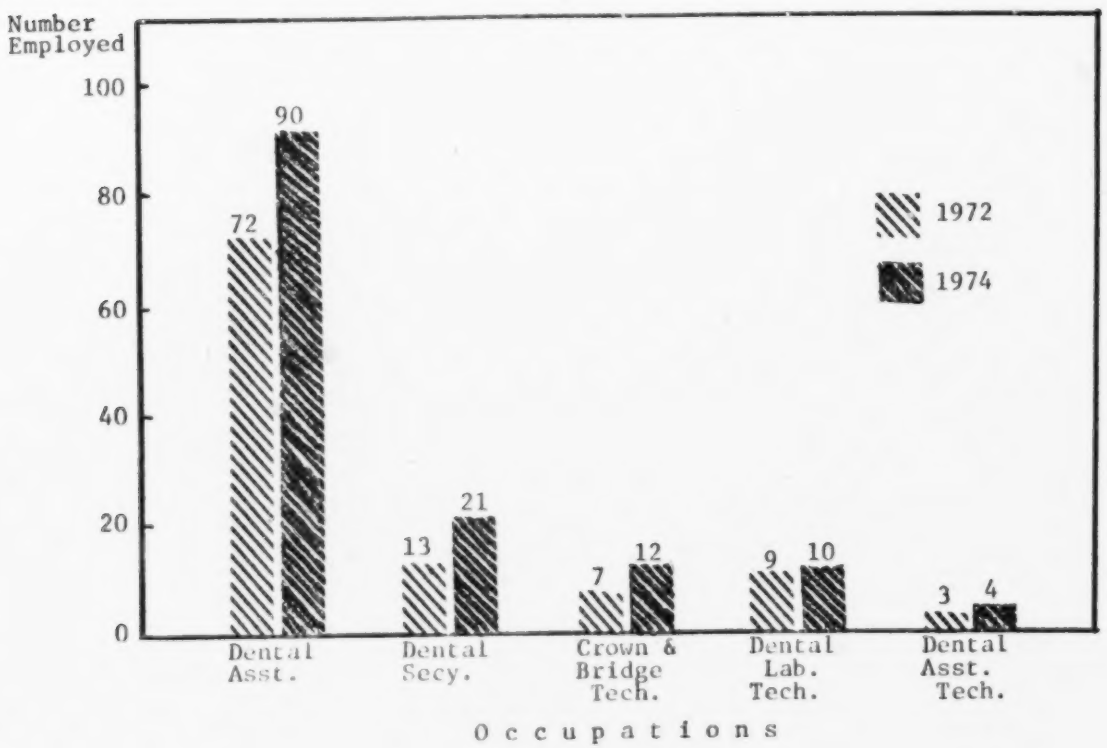
MVCC District
1972 Employment and 1974 Projections for Technician Occupations



Employment in the dental occupations is displayed in FIGURE 9. Consistent with national projections, greatest growth is anticipated in the dental assistant category. Little growth is expected in the other occupations.

FIGURE 9.

MVCC District
1972 Employment and 1974 Projections for Dental Occupations



VII. Supply of New Applicants

Employers were asked to indicate their opinion of the supply of qualified applicants for the job titles which they currently employed. TABLE 5 displays a summary of medical employers' perception of the supply of qualified applicants. Job titles have been arbitrarily grouped together. Rank order is based on percent of "shortage of new applicants."

Shortages of qualified applicants in doctors' offices were reported for licensed practical nurses, medical secretaries, x-ray technicians and physician assistants. Nursing homes reported shortages in food service supervision, registered nurses, occupational therapy technicians and licensed practical nurses. Other medical employers either did not report their observations or reported "adequate" supply of new applicants.

TABLE 5.

Supply of New Applicants for Medical Occupations

Rank Order	Occupational Group*	Shortage	Adequate	Surplus
1	Technicians (N = 51)	37%	27%	5%
2	Nursing Related Occupations (N = 100)	35	56	9
3	Clerical and Records (N = 88)	28	65	7
4	Miscellaneous (N = 32)	25	53	22
5	Laboratory (N = 28)	14	61	14

*(Group breakdowns same as in FIGURE 1, except professional nursing and nursing-related categories have been combined.)

Dentists (TABLE 6) reported shortages of new applicants in most of their personnel categories. Applicants for dental technician positions are the most scarce.

TABLE 6.

Supply of New Applicants for Dental Personnel

Rank Order	Job Title	Shortage	Adequate	Surplus
1	Dental Assistant Technician (N = 16)	37%	63%	-%
2	Dental Secretary (N = 23)	35	65	-
3	Dental Laboratory Technician (N = 19)	32	63	1
4	Crown & Bridge Technician (N = 16)	31	69	-
5	Dental Assistant (N = 41)	27	71	2

Another supply consideration is the existence of other occupational training programs in the metropolitan area. Appendix F lists present health occupation programs at community colleges for the Metropolitan Chicago Area.

Most of the area community colleges have nursing A.D.N. programs. Few of the colleges have programs in physical therapy, histologic technology, nursing aide or prosthetics-orthotics.

VIII. Training Provided for New Employees

Employers were asked to report the training which their firm provides for new employees. The response distributions are shown in TABLE 7.

Generally, employers reported either "on-the-job training" or no training at all. Little formal or apprenticeship training is provided for the various job titles.

On-the-job training seems to be of two types, one type is an "orientation" type activity in which the firm introduces the new employee to the procedures of the firm. The other type of training offered is actual training of the employee on-the-job, e.g., nurse aide. In responding to this response category one would assume that health employers were reporting "orientation" type activities. Most health job titles require formal training prior to employment.

A majority of doctors' offices provide on-the-job training for their secretaries, medical secretaries and physician assistants. Nursing homes provide on-the-job training for a large percentage of their job titles.

TABLE 7.

Percent Reporting Training Program for Health Personnel

Rank Order	Occupational Group*	Type of Program: On-Job Training	Formal	Apprenticeship	None	Other
1	Clerical & Records (N = 124)	56%	8%	7%	28%	1%
2	Miscellaneous (N = 32)	53	16	6	19	6
3	Technical Occupations (N = 75)	45	7	1	43	4
4	Nursing-Related (N = 98)	43	21	8	24	3
5	Laboratory (N = 41)	34	7	0	54	5

*(Group breakdowns same as FIGURE 1, except professional nursing and nursing-related categories have been combined.)

Of the dentists responding to the "training provided by your firm" question, a majority reported training their own dental assistants (TABLE 8). On-the-job training declines as the complexity of the occupation increases.

TABLE 8.

Percent Reporting Training Programs for Dental Occupations

Rank Order	Occupation	On-Job Training	Formal	Apprenticeship	None	Other
1	Dental Assistants (N = 41)	66%	12%	12%	10%	0
2	Secretary (N = 19)	53	0	5	42	0
3	Dental Secretary (N = 24)	46	4	4	46	0
4	X-Ray Technician (N = 15)	27	6	6	60	0
5	Dental Assistant Technician (N = 15)	26	7	0	67	0
6	Dental Laboratory Technician (N = 15)	20	0	7	73	0
7	Crown & Bridge Technician (N = 14)	7	7	0	86	0

IX. Interview Schedule Summary

To gain additional insights into the local health manpower situation, an interview schedule was developed (See Appendix C.). Administrative personnel from the district's four hospitals and three large nursing homes were interviewed during January and February, 1972. Except in two cases, these interviews were with the head administrators. Specific data were collected on the same job titles in the mailed questionnaire survey. These data are incorporated in that section of the report.

A. General Observations

These administrators indicated a continuing need for all health occupations. This suburban area is seen as an area of continued growth and affluence-both contributing factors for health facility expansion.

Most of these administrators were reluctant to project two years ahead for specific health occupations. However, they see a continuing trend of occupational specialization and a growing demand for more and better health services.

No immediate (by 1974) building plans are anticipated. One of the hospitals is anticipating an expansion of its present facilities, and the new Palos Community Hospital plans continual expansion as local needs dictate. Later in this decade, a new nursing home and extended care facility is being planned in the Orland Park area.

B. Sources of New Personnel

For most health personnel categories, hospitals seem to rely on a variety of training programs as sources for their new employees. However, they investigate any available source. Nursing homes tend to rely on "retired nurses" for their R.N.'s and on Thornton Community College for L.P.N.'s. These nursing homes send their aides to MVCC nurses aide (assistant) course.

C. Turnover

Turnover of existing personnel must be considered in all manpower planning activities. Figures for these seven facilities range from 25% to 50% for all personnel categories. However, most of this turnover occurs at the nurse aide level.

D. Specific Health Occupation Needs

Hospitals identified nursing to be a continuing employment concern. The apparent shortage of registered nurses is misleading. Lack of nurses occurs during evening shifts. Generally, there is an overabundance of applications for day shifts. Campbell et.al. (1968) indicate that if all retired nurses went back to work there would be no nurse shortage.

Nursing homes do not anticipate increasing significantly the number of R.N.'s. L.P.N.'s are assuming more of the nurse supervisory functions.

Medical laboratory technicians and radiologic technologists were identified as specific occupational needs over the next two years.

Two of the four hospitals strongly emphasized their anticipated reliance on MVCC as a major source for nursing (A.D.N.) personnel during the next decade.

E. Comment on Existing MVCC Programs

Feedback on MVCC health training programs was favorable.

However, mixed feedback was reported on the present nurse aide program. The following two quotes are representative:

- "Instruction has left something to be desired."
- "We may discontinue sending our aides to this program. We have to orient them to our own procedures anyway."

F. Need for New Courses or Programs

The following activities were mentioned by several administrators as areas where short courses or evening seminars would be desirable. No commitments of personnel were made by these administrators to any of these activities.

1. Medical terminology for aides and office personnel (hospitals and nursing homes)
2. Rehabilitation training for all levels of nursing personnel (nursing homes)
3. Geriatrics for all personnel levels (nursing homes)
4. Food service supervision (hospitals and nursing homes)
5. Housekeeping supervision (hospitals and nursing homes)
6. Administrators' short course (nursing homes)
7. Activity program coordinators (nursing homes)

The following two-program recommendations would meet immediate needs:

1. Physical Therapy Assistant
2. Physician Assistant

X. Predictions

National and local manpower data, along with local supply and local training programs, support the following predictions for present MVCC programs and future program directions.

1972 MVCC Programs

A. The need for registered nurses in the district will increase over the next two years due to the following factors:

- Two major hospitals including the new Palos Community Hospital, will be dependent on MVCC A.D.N. graduates.
- Present hospital shortage of R.N.'s for evening duty.
- Growing district population and subsequent addition of more hospital beds.
- A large number of neighboring colleges have established A.D.N. programs.

B. Medical laboratory technician employment is expected to increase substantially during the next two years. Much of this increase is a result of the new Palos Community Hospital and the increasing use of diagnostic tests for preventative medicine.

C. Employment opportunities for x-ray technicians will probably exceed present supply during the next two years. Shortages of qualified x-ray applicants were reported by several employers. The new Palos Community Hospital plans to add several x-ray technicians.

D. Medical record technician employment is expected to increase during the next two years. Many employers recognize the need for this technician but report difficulty locating qualified personnel. Many medical secretaries and other clerical personnel are trained on-the-job to perform M.R.T. functions.

E. No significant increases were reported for inhalation therapists and operating room technicians. However, turnover rates and increased awareness of these two specialized functions should create a continuing demand for these services.

F. The nurse aide (asst.) will continue to be trained on-the-job in hospitals. Nursing homes will continue to send their personnel to MVCC aide program. MVCC appears to be the only agency in this area offering instruction for these personnel.

Future Program Possibilities

A. Most dental health occupations represent excellent employment opportunities. National and local manpower projections support this conclusion. Also, many MVCC dental employers reported shortages for all dental occupational categories.

B. Dental assistant represents an occupation in which the employer reported on-the-job training. Present employment is large and significant growth is projected. The data do not reveal whether MVCC district dentists are training their own dental assistants or are employing these personnel from nearby training programs. (See Appendix F.)

C. Physical therapy assistants are in demand by nursing homes and hospitals. Growth in this area is a result of increased emphasis on rehabilitation and the lack of registered physical therapists. Only two of the area community colleges have programs for this occupation.

D. Physician assistants are becoming more widely accepted and some need is projected for this area. Lack of widespread acceptance and legal recognition of their duties has held back significant employment growth in this area. Lack of area training programs may reflect this ambiguous status.

E. Nursing homes reported an up-grading training need for dietary personnel in all employment categories. Programs offered in this area should be short-term and scheduled at convenient times so currently employed personnel could attend after work. No formal training programs have been established in this area for dietary personnel.

F. No strong evidence existed for the establishment of a licensed practical nurse program. Although L.P.N. employment is projected to increase both nationally and locally, the present training agencies appear to meet the MVCC district need. Thornton Community College was mentioned as the major source for L.P.N.'s in the MVCC district.

G. A widespread need among health employers exists for short courses or evening seminars in a variety of health areas. These needs have been described in the interview schedule section. (Section X.)

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APPENDIXES

Appendix A

Postcard Mailing Prior to Questionnaire

Dear Health Services Employer:

Within a few days you'll be receiving a questionnaire requesting information on various health job titles. Your responses will be valuable to Moraine Valley Community College's future program planning.

You'll be hearing from us soon.

Dr. L. H. Willett, Research Associate
Moraine Valley Community College

MORAINE VALLEY COMMUNITY COLLEGE

10900 South 88th Avenue
PALOS HILLS, ILLINOIS
60465

Phone 974-4300
Area Code 312

February 10, 1972

Dear Sir:

This is the questionnaire we told you about. By answering a few questions, you can help us determine the need for health occupation programs at Moraine Valley Community College. Investments in people, facilities, equipment and supplies will depend on the information you give us.

Since we try to offer courses to meet community needs, we would appreciate your taking the time to complete the enclosed questionnaire. Your responses will be held in strict confidence and will become part of a summary.

Thank you for your cooperation. A business reply envelope is enclosed for your convenience.

Sincerely,

Dr. L. H. Willett, Research Associate
Office of Institutional Research

LHW/st

Enclosure

MORAINE VALLEY COMMUNITY COLLEGE

10900 South 88th Avenue
PALOS HILLS, ILLINOIS
60465

Phone 974-4300
Area Code 312

February 22, 1972

Dear Health Services Employer:

We've been wondering why we haven't heard from you. About ten days ago we mailed a questionnaire which gave you the chance to provide information which will help us develop quality health programs.

Perhaps you mislaid the questionnaire or haven't had the time to fill it out. Your answers are important to us; they'll help us serve Southwest Cook County better.

Enclosed is another copy of the questionnaire. Please complete it today. We'd appreciate it.

Sincerely,

Lynn H. Willett

Dr. Lynn H. Willett, Research Associate
Office of Institutional Research

LHW/st

Enclosure

Appendix A

Postcard Mailing After Follow-Up Questionnaire

Dear Health Services Employer:

We have not received our questionnaire from you. We have heard from a large number of your colleagues but we need your responses to make our study complete.

Maybe you didn't think it was important to send it in. It is very important if we are going to develop health programs which reflect the community's need.

Please return it today.

Dr. L. H. Willett, Research Associate
Moraine Valley Community College

Employment Survey

Listed below are a number of health occupation job titles. Record responses only for those job titles which you currently employ.

In column 1 report the number of present employees and the number you anticipate by 1974 for each job title. If answer is none, enter zero in column.

In column 2 check the boxes which indicates your view of the supply of qualified applicants for each job title.

Column 3 requests you to indicate, by checking the appropriate boxes, the type of training available for each job title at your institution.

Job Titles	1. Employment Figures (Report Number)		2. Supply of Qualified Applicants This Year (✓appropriate column)			3. Training Provided By Your Firm For New Employees (✓appropriate column)				
	No. Employed Today--Full-Time Equivalent	Projected for 1974	Surplus	Adequate	Shortage	None	Apprenticeship	Formal Training	On-the-Job	Other
an example:										
107 NURSE ASST (AIDE)	15	23		✓			✓			

Employment Questions

For each of the job titles listed on the accompanying response sheet, please answer each of the three questions listed below.

1a. Indicate on the response sheet the number of employees you presently employ for each of the listed job titles.

1b. Estimate the number of employees for each of the job titles you anticipate by 1974. If answer is none, enter zero in column.

2. Indicate the supply of qualified applicants during this year for each of the listed job titles. Circle the appropriate letter on the response sheet.

   a. Surplus of applicants

   b. Adequate supply of applicants

   c. Shortage of applicants

3. By circling the appropriate letters on the response sheet, indicate the type of training provided by your establishment for each of the job titles.

   a. None

   b. Apprenticeship

   c. Formal training

   d. On-the-job

   e. Other

RESPONSE SHEET

Use This Response Sheet To Record Your Answers To The Questions From The Accompanying Sheet

Job Titles	Report Numbers In These Columns	Circle Responses In These Columns	Circle Responses In These Columns
an example:			
IOY NURSE ASST (AIDE)	1a ____ b ____	2a b c	3a b c d e
(Job titles relevant to S.I.C. are listed in this space)			
	1a ____ b ____	2a b c	3a b c d e
	1a ____ b ____	2a b c	3a b c d e
	1a ____ b ____	2a b c	3a b c d e
	1a ____ b ____	2a b c	3a b c d e
	1a ____ b ____	2a b c	3a b c d e
	1a ____ b ____	2a b c	3a b c d e
	1a ____ b ____	2a b c	3a b c d e
	1a ____ b ____	2a b c	3a b c d e
	1a ____ b ____	2a b c	3a b c d e
	1a ____ b ____	2a b c	3a b c d e
	1a ____ b ____	2a b c	3a b c d e
	1a ____ b ____	2a b c	3a b c d e
	1a ____ b ____	2a b c	3a b c d e
	1a ____ b ____	2a b c	3a b c d e
	1a ____ b ____	2a b c	3a b c d e
	1a ____ b ____	2a b c	3a b c d e
	1a ____ b ____	2a b c	3a b c d e
	1a ____ b ____	2a b c	3a b c d e
	1a ____ b ____	2a b c	3a b c d e
	1a ____ b ____	2a b c	3a b c d e
	1a ____ b ____	2a b c	3a b c d e
	1a ____ b ____	2a b c	3a b c d e
	1a ____ b ____	2a b c	3a b c d e

Appendix C

HEALTH OCCUPATION SURVEY

Para-Professional Interview Schedule

Date: _____

Hospital: _____ Address: _____

Name of Person Providing Data: _____

Position: _____ Dept. (or Area): _____

1. What per cent of your para-professional staff retire, die or leave for some other reason each year?

2. In which "previous activity" category do most of your new para-professional employees fall?

3. What is your most critical para-professional health personnel need?

4. a. What are your program(s) needs for up-grading skills of your present para-professional personnel?

   b. If you have needs in this area, do you anticipate establishing a program now?

Appendix D

Health Employer Survey Response by Type of Firm

Employer	Number of Firms	Percent of all Health Services	Number of Respondents	Percent of all Responses
Physicians & Surgeons	183	53%	78	48%
Dentists & Dental Surgeons	96	28	49	30
Osteopathic Physicians	5	1	0	0
Chiropractors	7	2	4	2.5
Hospitals*	4	1	4	2.5
Medical & Dental Laboratories	17	5	5	3
Health Services-not elsewhere classified*	35	10	23	14
Totals	347	100%	163	100%

*(Includes firms which were interviewed.)

Appendix E

Survey job titles and respective employers listed below are the job titles in the survey. Associated with each job title are their respective employers represented as S.I.C. (See end of list for S.I.C. designations.)

Job Title	Employer S.I.C.
AUDIOMETRIC TECHNICIAN	806
BIOLOGICAL LABORATORY TECHNICIAN	806
BIO-MEDICAL EQUIPMENT TECHNICIAN	806
BIO-MEDICAL PHOTOGRAPHY	806
CARDIO PULMONARY TECHNICIAN	806
CORRECTIVE THERAPY AIDE	806
CROWN AND BRIDGE TECHNICIAN	802
CYTOTECHNOLOGIST	806
DIET CLERK	806, 809
DIETITICIAN ASSISTANT	806
DENTAL ASSISTANT	802
DENTAL ASSISTANT TECHNICIAN	802
DENTAL LABORATORY TECHNICIAN	802
DENTAL SECRETARY	802
E E G TECHNICIAN	806
E K G TECHNICIAN	806
EXECUTIVE HOUSEKEEPER	806
FOOD SERVICE SUPERVISOR	806, 809
H V THERAPIST	806
HISTOLOGIC TECHNICIAN	806
INHALATION THERAPIST	806
LICENSED PRACTICAL NURSE	801, 803, 804, 806, 807, 809
MECHANO THERAPY TECHNICIAN	806
MEDICAL ASSISTANT	807
MEDICAL COMPUTER TECHNICIAN	806
MEDICAL LABORATORY ASSISTANT	801, 803, 804, 806, 807, 809
MEDICAL LABORATORY TECHNICIAN	801, 803, 806, 807, 809
MEDICAL RECORD LIBRARIAN	806
MEDICAL RECORD TECHNICIAN	801, 803, 804, 806, 809
MEDICAL SECRETARY	801, 803, 804, 806, 807, 809
NUCLEAR MEDICAL TECHNICIAN	806
NURSE ASSISTANT AIDE	806, 809

OBSTETRICAL TECHNICIAN	806
OCCUPATIONAL THERAPY TECHNICIAN	806, 809
OPERATING ROOM TECHNICIAN	806
OPTHALMIC DISPENSOR	806
ORDERLY	806, 809
ORTHOPTIC TECHNICIAN	806
PHARMACY AIDE	806
PHARMACY ASSISTANT	806
PHYSICAL THERAPY TECHNICIAN	806
PHYSICIAN ASSISTANT	801, 806
PSYCHIATRIC ASSISTANT	806
RADIOISOTOPE TECHNICIAN	806
RADIO THERAPY TECHNICIAN	806
RECREATION THERAPY ASSISTANT	806
REGISTERED NURSE	801, 803, 804, 806, 807, 809
SECRETARY	801, 802, 803, 804, 806, 807, 809
SOCIAL WORKER AIDE	806, 809
SURGICAL AIDE	806
SURGICAL ORDERLY	806
TEAM NURSE	806
THOPEDIC TECHNICIAN	806
TRANSFUSION THERAPY AIDE	806
UNIT WARD MANAGER	806
WARD CLERK	806, 809
X-RAY CLERK	806
X-RAY TECHNICIAN	801, 802, 803, 804, 806, 809

S.I.C. Codes and Titles:

801 - OFFICES OF PHYSICIANS AND SURGEONS

802 - OFFICES OF DENTISTS AND DENTAL SURGEONS

803 - OFFICES OF OSTEOPATHIC PHYSICIANS

804 - OFFICES OF CHIROPRACTORS

806 - HOSPITALS

807 - MEDICAL AND DENTAL LABORATORIES

809 - HEALTH AND ALLIED SERVICES, NOT ELSEWHERE CLASSIFIED

Appendix F

Chicago Metropolitan Area Community Colleges and Health Occupation Programs**

Health Occupation Program	Amundsen-Mayfair	DuPage	Elgin	Joliet	Kennedy-King	Lake County	Loop	Malcolm X	McHenry County	NWCC	Norton	Prairie State	Southeast	Thornton	Triton	Waubonsee	Wilbur Wright	William Rainey Harper	Totals
Dental Assisting			X			X	X				X	X			X				6
Dental Hygiene												X						X	2
Health Facilities Mgmt								X											1
Histologic Technician								X											1
Inhalation Therapy								X		X					X				3
Medical Health Tech												X							1
Med. Laboratory Tech	X							X	X	X									4
Medical Records Tech		X						X		X									3
Nursing-Aide										X*									1
Nursing-Assoc. Degree	X	X	X	X	X			X		X	X	X	X	X	X			X	13
Nursing-L.P.N.					X										X			X	3
Occupational Therapy								X						X					2
Operating Room Tech								X		X									2
Pharmacy Aide								X											1
Physical Therapy								X			X								2
Prosthetics-Orthotics													X						1
Radiologic Tech		X						X		X				X	X		X		6
Transfusion Therapy								X											1
Ward Clerk								X											1
Totals	2	3	2	1	2	1	1	13	1	7	3	4	2	3	5	0	1	3	

* Short Course (four weeks)

** (Source: Illinois State Chamber of Commerce, 1970.)

UNIVERSITY OF CALIF.
LOS ANGELES

JUL 27 1973

CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION